

For Research Use Only

# ATG4D Recombinant antibody, PBS Only (Detector)

Catalog Number: 83951-4-PBS



## Basic Information

<b>Catalog Number:</b> 83951-4-PBS	<b>GenBank Accession Number:</b> BC068992	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 84971	<b>CloneNo.:</b> 241035G8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q86TL0	
<b>Isotype:</b> IgG	<b>Full Name:</b> ATG4 autophagy related 4 homolog D (S. cerevisiae)	
<b>Immunogen Catalog Number:</b> AG10177	<b>Calculated MW:</b> 474 aa, 53 kDa	
	<b>Observed MW:</b> 53 kDa	

## Applications

**Tested Applications:**  
WB, IHC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, rat

## Product Information

83951-4-PBS targets ATG4D as part of a matched antibody pair.

MP00902-3: 83951-1-PBS capture and 83951-4-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

ATG4D, a member of autophagy-related protein 4 (ATG4) family, plays an interplay role between autophagy and apoptosis in cancers. There are two Atg4 family members-Atg4C and Atg4D-contain cryptic mitochondrial targeting sequences immediately downstream of their canonical(DEVD) caspase cleavage sites. Consequently, caspase-cleaved Atg4D (DN63 Atg4D) localizes to the mitochondrial matrix when expressed in mammalian cells, where it undergoes further processing to a ~42 kDa mitochondrial form.

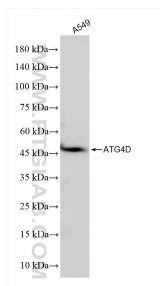
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

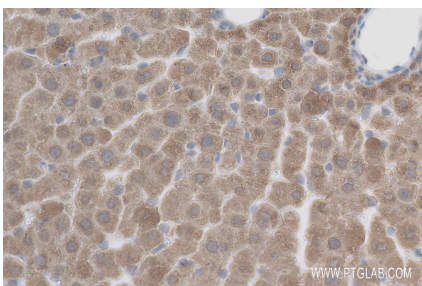
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

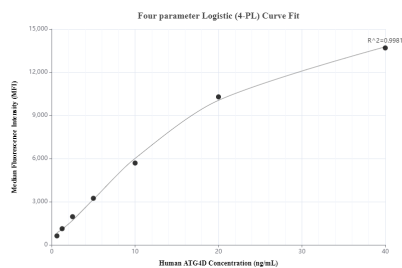
## Selected Validation Data



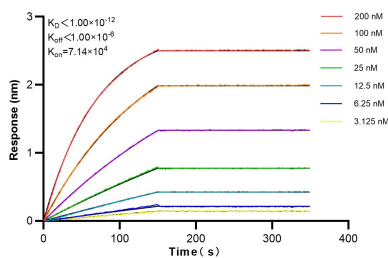
A549 cells were subjected to SDS PAGE followed by western blot with 83951-4-RR (ATG4D antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83951-4-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 83951-4-RR (ATG4D antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83951-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00902-3, ATG4D Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83951-1-PBS. Detection antibody: 83951-4-PBS. Standard: Ag10177. Range: 0.625-40 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 83951-4-RR against Human ATG4D were performed. The affinity constant is below 1 pM.